Resiliency Index
Community Self Assessment

What is your community's resilience to a disaster?

DISASTER RESILIENCE is the capacity of a community exposed to hazards to adapt, by resisting or changing, in order to reach and maintain an acceptable level of functioning and structure.

RESILIENCE is determined by the degree to which the community is capable of organizing itself to increase its capacity for learning from past disasters.*

The **PURPOSE** of this Self Assessment is to provide communities with an efficient, cost effective method of determining if their community will reach and maintain an acceptable level of functioning and structure after a disaster. Using existing knowledge, data, and studies, experienced local planners, engineers, floodplain managers, or administrators can complete the Self Assessment. The assessment identifies issues the community should address (problems that need solutions) before the next disaster and where attention and money may serve the community best. Results of the Assessment are presented as a Resiliency Index that estimates the exposure of the community to a disaster.

The Resiliency Index and methodology does not replace a detailed study just as a self-examination for skin cancer is not a substitute for a check-up and tests by a dermatologist. But the Resiliency Index resulting from a Community Self Assessment, may encourage a community to seek further consultation. CAUTION: The Community Self Assessment is date-specific and should be periodically applied as the community grows and/or the landscape changes such as shoreline erosion accelerates. Community officials should decide when to conduct a new Assessment.

RESILIENCY INDEX - a Resiliency Index is an indicator of your community's ability to reach and maintain an acceptable level of functioning and structure after a disaster.

A RESILIENCY INDEX is indicated as LOW, MEDIUM, or HIGH.

LOW Resiliency Index. A LOW rating indicates the community will probably suffer major damage to its Sewage Treatment System, its Power Grid, its Water Purification System, and its Transportation/evacuation routes. Reoccupation of the community will take months, and it may take up to 18 months before the community can reach an acceptable level of functioning and structure.

Your community answers YES to:

2 or fewer items under Element 3;
2 or fewer items under Element 4; and/or
1 item under Element 5.

MEDIUM Resiliency Index. A MEDIUM rating indicates the community will probably suffer major damage to at least one of its basic services (Sewage, Water, Power Grid, Transportation/evacuation routes) and more than four of the other critical facilities. The impacted basic service can be operational in less than two months, permitting people to return.

Your community answers YES to:

3 to 5 items under Element 3;
3 to 6 items under Element 4; and/or
2 -3 items under Element 5.

HIGH Resiliency Index. A HIGH rating indicates the community will probably not suffer or will have minimal damage (can be repaired in less than one month) to its basic services (Sewage, Water, Power, Transportation/evacuation routes) and minimal damage to the other critical facilities (can be quickly relocated, are functioning and the community structure is regained in less than one week after the disaster).

Your community answers YES to:

6 or more items in Element 3;
7 items under Element 4; and/or
4 items under Element 5.

The following are Key indicators that will give a preliminary assessment of your community's disaster resilience. A more detailed assessment process is available in the FEMA 386-2 publication.

1. **Are these critical facilities located in these areas and will they function:**

Critical Facilities	Special Flood Hazard Area (SFHA)	Storm of Record	Storm of Record plus 50% of the surge height	Facility functions after impacted by disaster
Sewerage Treatment System				
Power grid				
Water Purification System				
Transportation/evacuation routes				
City Hall				
Police Station				
Fire Station(s)				
Communications				
Emergency Operation Center				
Evacuation Shelters				
Hospitals				

Storm of Record – the greatest inland extent or depth of storm surge as described by the National Weather Service and/or mapped by the Corps, USGS, or FEMA.
Storm of Record plus 50% of the surge height is the criteria for mapping the inland extent of flooding. Mapping is by the community's Department of Engineering or Public Works.

2. **Will your transportation/evacuation route(s) be blocked by the following and take more than a week to regain a pre-storm level of service**
   - **a.** Bridge(s) out Y or N
   - b. Storm debris and/or trees blocking roads Y or N
   - c. Washouts Y or N
   - d. Low spots that quickly flood and prevent its use Y or N
   - e. If your community has more than a single evacuation route, do the roads still have the traffic capacity to evacuate people safely even if one route is block? Y or N

3. Does your community:

a. participate in the Community Rating System? Y or N
b. use an early warning system? Y or N
c. have a Certified Floodplain Manager? Y or N
d. have a professional planning staff with AICP credentials Y or N
e. have an approved Hazard Mitigation Plan? Y or N
    i. Has it been revised within the past two years? Y or N
f. have Memorandum of Understanding (MOU) or Memorandum of Agreement (MOA) with neighboring communities to help each other during times of disaster? Y or N
g. have a comprehensive/strategic plan that includes a "Natural Hazard" section? Y or N
h. Floodplain Manager or Planner participate in professional organizations?
    i. Association of State Floodplain Managers OR State Floodplain Management Association? Y or N
    ii. American Planning Association OR state Chapter? Y or N
    iii. American Society of Civil Engineers OR State or local section of ASCE? Y or N
    iv. American Public Works Association? Y or N

4. **Has your community implemented mitigation measures?**

a. Elevation of residential, nonresidential, or infrastructure to local National Flood Insurance Program standards Y or N
b. Relocation of buildings and infrastructure Y or N
c. Flood proofing non-residential structures Y or N
d. Education programs Y or N
e. Acquisition of repetitive loss structures or infrastructure Y or N
f. Incentives-based mitigation measures Y or N
g. Has your community adopted the International Building Codes? Y or N

5. FOR SMALLER COMMUNITIES ONLY. Is there a social system that defines the community or serves as the core of the community?

a. Religious unity	Y or N
b. Cultural identity	Y or N
c. Business cooperative or working relations	Y or N
d. Family structure and values	Y or N

ADDITIONAL FACTORS THAT WERE CONSIDERED

*Both definitions are from the Subcommittee on Disaster Reduction. 2005. Grand Challenges for Disaster Resilience. National Science & Technology Council, Committee on Environment and Natural Resources. Washington, DC: National Science and Technology Council.

Summary of Community Self-Assessment – A Resiliency Index

Critical Facilities	Facility functions after impacted by disaster	Number of YES	High Medium Low Rating	Comments
Sewerage Treatment System				
Power grid				
Water Purification System				
Transportation/evacuation routes				
City Hall				
Police Station				
Fire Station(s)				
Communications				
Emergency Operation Center				
Evacuation Shelters				
Hospitals				
Element 2				
Element 3				
Element 4				
Element 5				

OVERALL RESILIENCY INDEX FOR THE COMMUNITY:

DISCUSSION OF RESULTS